REMARKS

Taking into account that the disclosure and claims of the application are directed to one of ordinary skill in the art, the objections to the drawings, Abstract, disclosure and claims, as well as the rejection under 35 U.S.C. § 112, ¶2 are deemed fully addressed by the above proposals.

The showing of the vacuum pump and inert material pipe is unnecessary as these are not positively claimed limitations defining the invention and are, in any event, well known. The quibble about "pyrometric" is not well taken as that term is perfectly appropriate in terms of how and for what purpose the probe is used to take (or extract) samples.

As should be clear, applicant was confronted with the prior art approach in which it was necessary to keep the collected soil sample moist while being transferred to the laboratory. This had a huge drawback, namely the aqueous solution or substrate from the soil profile was not used directly. Thus, a distortion was present in the analysis depending mainly on the qualitative composition of the water used.

Applicant solved this problem with a pyrometry capsule of porous porcelain, permeable to the soil solution and not modifying the primitive characteristics of the solutions. A groove in the capsule allows for attachment of a tube of completely inert material such as PVC or polyethylene. The external diameter of the tube is preferably flush with the external diameter of the capsule. At the free end of the tube, a rubber or PVC cap is attached forming a

hermetic seal, to which the ends of an adaptor tube for a vacuum pump and a suction capillary are attached that are introduced along their length inside the probe.

Applicant's device is useful for performing sampling of an aqueous solution with respect to soils with different horizontal soil profiles (soil solution), soil drainage, artificial inorganic substrates (saturated or non-saturated), and artificial organic substrates (saturated or non-saturated). The invention has particular application in farming, environmental and industrial applications and methods.

For farming applications, for example, the device is usable to study the composition of different chemical forms, determine evolution and degradation of organic compounds (chelates) and inorganic compounds in their various chemical forms and also determine the evolution and availability of fertilizing nutrients in general along a soil profile.

For environmental applications, for example, the invention can be used to control contaminating effluents, such as nitrates, nitrites, and phytosanitary compounds in general, determine chemical evolution of inorganic compounds, organic compounds (chelates, insecticide residues), and control aquifer.

For industrial methods, the device is usable for controlling solid and/or liquid decantation tank and residue control.

Reconsideration of the rejections, which are traversed, of Claims 1-4 as being unpatentable over Ruggeri in view of Tosa et al., Kelly et al., Wilks and

Mitchell et al., of Claims 2 and 4 as being unpatentable over Ruggeri, Tosa et al., Kelly et al., Wilks, Mtichell et al. and Greenler et al., and of Claims 2, 4 and 5 as being unpatentable over Ruggeri, Tosa et al., Kelly et al., Mitchell et al. and Di Cesare et al., all under 35 U.S.C. § 103(a) is requested.

The rejections do not set forth a prima facie case of obviousness based upon substantial record evidence. Instead, they rely upon insidious impermissible hindsight, using applicant's own disclosure against him.

In addition, the rejections are internally inconsistent, and do not follow the PTO policy of selecting the most pertinent prior art and avoiding multiple rejections of the same claims. The three rejections do not follow that practice or serve to narrow the issues. Is, for example, Claim 4 obvious over the four references relied upon in paragraph 20 of the Office Action, or does the rejection require the Greenler et al patent as used in paragraph 21 and/or the Di Cesare et al. patent as used in paragraph 22? If the latter, the rejection of Claim 4 in paragraph 20 is flawed by the Examiner's own admission. Applicant believes he is entitled to a new non-Final Office Action to be allowed to fully understand the Examiner's position, unless, of course, the Examiner agrees that the rejection, including the traversed rejection of Claims 2-5, under 35 U.S.C. § 101, are deemed overcome by the above claim amendments.

Applicant will make the following brief comments with respect to the cited prior art to show that the Office Action has merely picked elements from that

prior art without a "game plan" that would have made such picking an obvious task.

The Ruggeri apparatus is a laboratory device for multiple extraction of biological samples and dispensation of these samples into multiple analysis tubes. Aside from the fact that it uses small vacuum pumps for extracting the sample from the test tubes, it is totally unrelated to the claimed device herein.

The Tosa et al. patent involves a device and a system with a vacuum pump for detecting endotoxins in a culture. The size, placement and use have nothing to do with the claimed probe herein. Again, the only thing that is arguably related is that a vacuum pump is used, and a form of probe is used for performing the culture and carrying out the reaction.

The Kelly et al. patent is the type of device used for collecting blood and other laboratory biological specimens. Absent hindsight, it is impossible to understand why one of ordinary skill would have looked to this document for any relevant teaching. The same can be said about the Wilks patent, which, though a sample extractor, is an automated device which includes a probe assembly.

The Mitchell et al. patent is directed to a device with a small ceramic component for baking samples of different origin, allowing certain gases to escape. It is totally irrelevant to the present invention save for the coincidental small ceramic part which has a different function.

The Di Cesare et al. apparatus is a device with a permeable membrane for taking "environmental" samples and measuring low levels of hydrophobic

analytes. This device, apart from it being a type of sampler that can take samples of use in environmental impact in which the sample goes to a type of recipient installed in the ground, does not have anything to do with applicant's probe.

Accordingly, early and favorable action on the claims is earnestly solicited.

If there are any questions regarding this amendment or the application in general, a telephone call to the undersigned would be appreciated since this should expedite the prosecution of the application for all concerned.

If necessary to effect a timely response, this paper should be considered as a petition for an Extension of Time sufficient to effect a timely response, and please charge any deficiency in fees or credit any overpayments to Deposit Account No. 05-1323 (Docket #2374/49228).

Respectfully submitted,

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